

Texas Pollutant Discharge Elimination Systems (TPDES)  
Construction Storm Water General Permit  
(TXR150000)

Storm Water Pollution Prevention Plan

**Worksheet Instructions**

**DRAFT (12/02/03)**

*The TCEQ Small Business and Local Government Assistance (SBLGA) section has developed these worksheets to assist you in developing a Storm Water Pollution Prevention Plan (SWP3) under the Texas Pollutant Discharge Elimination System Construction General Permit. These are not official State documents and their use in whole or in part does not guarantee compliance with the TPDES permit. These worksheets are for guidance purposes only and should not be used as a substitute for the requirements outlined in the Part III of the TPDES permit relating to minimum SWP3 requirements. Feel free to alter the forms for your individual needs. It is recommended that you make a copy of the worksheets to maintain as originals, as some of the worksheets can be used for periodic inspections that will require one worksheet per inspection.*

**Worksheet 1** - Operators with Control over Construction Plans and Specifications

*Part III, Sect.B.1.(a)-(d)*

The Operator(s) with operational control over construction plans and specifications are responsible for the developing, implementing, maintaining, and revising the SWP3. These responsibilities should be clearly defined within the SWP3. Worksheet 1 allows for a brief description of how you will meet each of the elements in Part III Sect B.1.(a)-(d). Individuals who meet the eligibility requirements for **Signatory Authorities** (30 TAC§ 305.128) and who will have control over the activities in the descriptions should be listed in the lines provided at the bottom of Worksheet 1.

**Worksheet 2** - Operators with Day-to-Day Operational Controls

*Part III, Sect. B.2.(a)-(d)*

The Operator(s) with day-to-day operational control will be responsible for all project activities necessary to ensure compliance with the SWP3 and other permit conditions. Worksheet 2 allows for a brief description of how you will meet each of the elements in Part III Sect B.2.(a)-(d). Individuals who meet the eligibility requirements for **Signatory Authorities** (30 TAC§ 305.128) and who will have control over the day-to-day activities in the descriptions should be listed in the lines provided at the bottom of Worksheet 2.

**Worksheet 3** - Site Description

*Part III, Sect. F.1.(a)*

Describe the nature of your construction activity. What are you constructing? What are the potential pollutants and their sources? Be as thorough as possible and include all activities that will disturb soil. The description for this portion of your SWP3 should allow an inspector to read and understand the what, how, where, and when of all construction activities taking place on-site. You may need additional space for a complete description or to update the description as plans change for the project.

#### **Worksheet 4** - Description of the Schedule or Sequence of Major Grading Activities.

##### *Part III, Sect. F.1.(b)*

In the table on Worksheet 4, describe the intended schedule or sequence of major activities that will disturb soils for major portions of the site. In column 1, describe the project phase (time period) when the activity will occur. In column 2, describe the activity (e.g. clearing, excavating, grading, structure construction). In column 3, describe where the activity will take place. (It may be helpful to divide the project site into sections for this step in order to better identify where on-site the activity will take place.) In column 4 estimate how many acres the activity will disturb.

#### **Worksheet 5** - Acreage, Material Storage, and Soil Type

##### *Part III, Sect. F.1.(c)-(d)*

Use the table at the top of Worksheet 5 to list stored materials, the number of acres they are stored on, and the storage location on the site. In the grey area at the bottom of the table, list the total acreage of the property and total acreage of the area where soil will be disturbed. Note that these will usually be two different numbers.

Data about the soil type must be included in your plan. Use the space at the bottom of this worksheet to list information about the type of soil on-site and to describe any discharge from the site. The soil description may include approximate percentage of rock, soil, sand, and clay. Discharge descriptions may include terms such as “silty”, “suspended solids”, or “sandy” and should agree with the soil type that you described. In order to accurately describe site discharge, you may need to collect and visually inspect a sample of your discharge during a storm event to observe the quality of the discharge.

#### **Worksheet 6** - Location Map

##### *Part III, Sect. F.1.(e)*

A map showing the general location of the site must be included in the SWP3. The map may be copied from a city or county map, downloaded from a map Web Site, or photocopied from any map that will show investigators where your site is located in relation to the surrounding area.

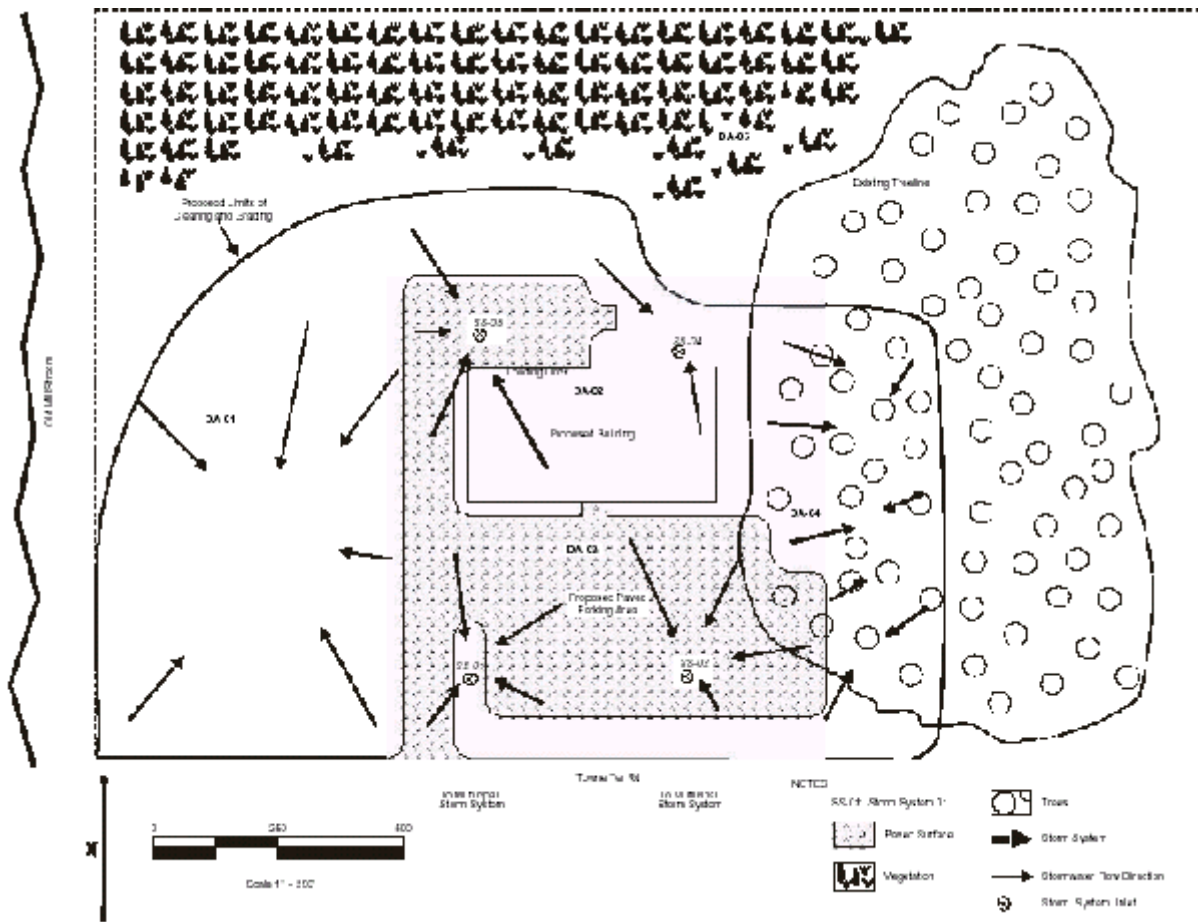
#### **Worksheet 7** - Detailed Site Map

##### *Part III, Sect. F.1.f.(I)-(vii)*

The SWP3 must include a detailed site map or maps. The map(s) may be hand-drawn or computer generated, and must include the entire site as well as:

- I.) Drainage patterns and approximate slopes anticipated after major grading activities;
- ii.) Areas where soil disturbance will occur;
- iii.) Locations of all major structural controls, either planned or in place;
- iv.) Locations where stabilization practices are expected to be used;
- v.) Locations of off-site material, waste, borrow, fill, or equipment storage areas;
- vi.) Surface waters (including wetlands) either adjacent or in close proximity; and
- vii.) Locations where storm water from the site discharges directly to a surface water body.

## Example Site Map:



## Worksheet 8 - Site Description, Support Facilities

### Part III, Sect. F.1.(g)-(h)

Use the first table on Worksheet 8 to describe and give the locations of any asphalt plants, concrete batch plants, or other support facilities authorized under this general permit. The location(s) may be on-site, a physical address for the plant, or descriptive directions from the construction project site to the facility identified.

Use the second table on Worksheet 8 to give the name and location of any receiving waters at or near the site that will be disturbed or receive discharges from the disturbed areas of the project. The nature of disturbance may be a direct discharge, indirect discharge, or other disturbance which you may describe in this column.

## Worksheet 9 - Best Management Practices (BMPs), Erosion and Sediment Controls

### Part III, Sect. F.2.a.(I)-(iv)

Erosion and sediment controls must be designed to retain sediment on-site to the maximum extent practicable with consideration for local topography and rainfall. Controls must also be designed to limit off-site transport of suspended sediments and other pollutants if it is necessary to pump or channel

standing water from the site. Examples of erosion controls include hay bales, silt fences, swales, mulch filter berms, rock berms, and vegetative filter strips. In the first table on Worksheet 9, list the erosion and sediment controls that you have implemented on-site, where they are located, how often they are inspected or require maintenance, and any modifications or replacements that are made to improve the BMPs performance throughout the length of the construction project.

If it is feasible to use sediment traps or ponds on your construction project, it will be necessary to remove sediments from the pond as soon as the design capacity has been reduced by 50%. Use the second table on Worksheet 9 to list the measures that will be implemented on-site to reduce pollutants from being transported off-site due to the pumping activities. If the size of the project will not permit the use of ponds on-site, this section will not apply to your SWP3.

### **Worksheet 10** - BMPs, Off-site Transfer of Pollutant Controls

#### *Part III, Sect. F.2.a.(v)*

Controls must be developed to limit off-site transport of litter, construction debris, and construction materials. Use Worksheet 10 to list your good housekeeping BMPs and describe their location, or the operating procedures used on-site. Examples of good housekeeping BMPs include making regular site sweeps to collect litter, strategically placed trash dumpsters, restricting where scrap construction materials may be stored, and ensuring that all wood or other building materials are stored inside trailers or buildings, or nailed down so that wind or storm events do not move them from their storage locations.

### **Worksheet 11** - BMPs, Stabilization Practices

#### *Part III, Sect. F.2.b.(i),(iii)*

The SWP3 must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible. Examples of stabilization practices are listed in the Construction General Permit in Part III Sect. F.2.b.i and are listed on Worksheet 11. To complete the table on Worksheet 11, use the examples listed, or any other BMPs you are planning on using that may prove to be effective in stabilizing the soil to minimize erosion.

### **Worksheet 12** - Major Grading Activities and Construction Stoppage

#### *Part III, Sect. F.2.b.ii.(a)-©)*

You must keep records to document:

- dates when major grading activities will occur;
- dates when construction activity will temporarily or permanently cease on the site; and
- dates when stabilization measures are initiated.

You may keep these records in your SWP3, or you may attach them or list their location. If you attach the records, answer “yes “ to “Documentation attached?” and then list the section of the SWP3 where they are attached. If you keep the records at another location, give that location and the name and telephone number of a contact person there. Remember that the records must be readily available if

state or local authorities ask for them. If you decide to keep the records in your SWP3, you may use the tables on Worksheet 12 to do so. Use the first table to list all major grading activities, and where and when they will take place. Use the second table to list areas where construction is not taking place. If you permanently cease construction for a location, give a date when final stabilization was or will be initiated. Make sure to provide this information for all activities on-site. Use additional copies of this form if you need them.

### **Worksheet 13** - Structural Control Practices

#### *Part III, Sect. F.3.(a)-(b)*

The SWP3 must include a description of any structural control practices used to divert flows away from exposed soils, to limit the contact of runoff with disturbed areas, or to lessen the off-site transport of eroded soils.

Indicate if your site will disturb 10 acres or more at any one time. If it will, is it feasible to install a sediment basin? Calculate the volume of a 2-year 24-hour storm event. This is the volume of water that your sedimentation basin must hold. In the first table, state which factors were used to help you decide whether a sedimentation basin would be feasible. You must consider *at least* all of the factors listed in the table.

If a sedimentation basin is not feasible, use the second table to list the controls that will be used instead of the basin. Remember that these controls must be at least as effective as a basin. The table lists some examples of alternative controls, but you may write others in. Use additional copies of this form if you do not have enough room to list all of your controls.

### **Worksheet 14** - Permanent Storm Water Controls

#### *Part III, Sect. F.4*

A description of any measures that will be installed during the project to control pollutants in storm water discharges that will occur **after** construction operations have been completed must be included in the SWP3. Use the table on Worksheet 14 to list any permanent controls that will be constructed during the project. For each control, give the location on-site, and describe the area(s) that the control will be receiving runoff from (i.e., road ways, parking lot, community park, landscaping, undisturbed areas). Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, the transfer of authority to another registered operator (or home owner in the case of residential construction), or prior to the submission of a Notice of Termination (NOT).

### **Worksheet 15** - Other Storm Water Controls

#### *Part III, Sect. F.5.(a)-(b)*

Other controls need to be incorporated into the SWP3 to control certain pollutants, such as off- site transfer of sediment and dust generation. Use the first table on Worksheet 15 to describe how you will control the off-site tracking of sediment at site entrances and exits, as well as any BMPs used to minimize on-site dust generation throughout the work day.

Use the second table on Worksheet 15 to list the construction and waste materials that will be stored on-site. List the average amount stored, give the on-site storage location, and describe the controls that will be used to reduce pollutants from these materials.

### **Worksheet 16** - Other Storm Water Controls (cont'd)

#### *Part III, Sect. F.5.(c)-(d)*

The SWP3 must include a description of pollutant sources from areas other than construction (including storm water discharges from dedicated asphalt plants and dedicate concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges. Use the first table on Worksheet 16 to list non-construction pollutant sources that may be associated with your project. (Asphalt plant and concrete plant have been listed as examples.) List the pollutants that may be discharged from the site and describe any controls that have been put in place to controls those pollutants.

Use the second table on Worksheet 16 to list the velocity dissipation devices used along and at the end of any outfall channel. Describe where the water discharges to and give the outfall number or distance interval where the device is located. Examples of velocity dissipation devices include hay bales, silt fences, and stone outlet sediment traps.

### **Worksheet 17a, 17b, and 18** - Inspection of Controls Forms

#### *Part III, Sect. F.8*

Inspections **must be** conducted at least once every 7 calendar days **OR** once every 14 calendar days and within 24 hours of the end of a storm event of a ½ inch or greater. If the inspections occur every 7 days, they must be conducted the same day every week regardless of rainfall events.

Personnel provided by the permittee and familiar with the SWP3 must inspect:

- disturbed areas of the construction site that have not been finally stabilized;
- areas used for storage of materials that are exposed to precipitation;
- and structural controls (for evidence of, or the potential for, pollutants entering the drainage system);
- sediment and erosion control measures identified in the SWP3 (to ensure they are operating correctly); and
- locations where vehicles enter or exit the site (for evidence of off-site sediment tracking).

You may use Worksheets 17a - 18 to document the inspections required by the TPDES CGP permit.

Use Worksheet 17a and 17b as a checklist to ensure that all required areas of the construction site are addressed. There is space to document the inspector's name as well as when the inspections regularly take place. The tables will document that the required area was inspected. (If there were any areas of concern, briefly describe them in this space with a more detailed description in the narrative section on Worksheet 18). Use the last table on Worksheet 17a to document any discharges found during the inspections.

Use Worksheet 17b to describe how effective the installed BMPs are performing. Describe any BMP failures that were noted during the investigation and describe any maintenance required due to the failure. If new BMPs are needed as the construction site changes, the inspector can use the space at the bottom of the worksheet to list BMPs to be implemented before the next inspection.

Use Worksheet 18 to describe the inspectors qualifications, how the inspection was conducted, and describe any areas of non-compliance with the TPDES permit in detail. If an inspection report does not identify any incidents of non-compliance, then it must contain a certifying signature stating that the facility or site is in compliance with the SWP3 and the TPDES permit. The report must be signed by a person and in a manner required by 30 TAC § 305.128. There is a line at the bottom of Worksheet 18 to allow for this certifying signature.

Whenever an inspection shows that BMP modifications are needed to better control pollutants in runoff, the changes must be completed within 7 calendar days following the inspection. If existing BMPs are modified or if additional BMPs are needed, you must describe your implementation schedule in the SWP3, and wherever possible, make the required BMP changes before the next storm event.

### **Worksheet 19** - Eligible Non-Storm Water Discharges

#### *Part III, Sect. F.9*

The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge. In the first table on Worksheet 19, indicate any of the approved non-storm water discharges that may apply to your site, how you will prevent pollution from these discharges, and when the pollution control measures will be in place. You will find a list of eligible non-storm water discharges in Part II.3.(a)-(g) of the TPDES permit as well as the table on Worksheet 19. Examples of pollution control measures may include having a dedicated area for vehicle washing, or minimizing runoff of water used for dust control.

Finally, use the last table to list any other non-storm water discharges that are permitted by another TPDES permit, an NPDES permit, or any other TCEQ permit, including a land application permit for waste water.

**Read the TPDES permit thoroughly** to ensure you are meeting all requirements for your specific construction project. You may need to include additional materials not covered within these worksheets including a copy of the actual permit, a copy of the NOI (if you are required to submit one), and all sampling information from concrete batch plants. Feel free to modify any or all of these worksheets to meet your needs. If further clarification or assistance is needed to develop your SWP3, please contact your regional TCEQ Small Business and Local Government Assistance representative or the SBLGA Hotline at 1-800-447-2827.

Other resources available:

1. <http://www.epa.gov/reg3wapd/stormwater/construction.htm>
2. <http://www.bmpdatabase.org>
3. <http://www.tnrcc.state.tx.us/permitting/waterperm/wwperm/construct.html>
4. [TCEQ RG-348](#), “Complying with Edwards Aquifer Rules: Technical Guidance on Best Management Practices”, June 1999